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PHASE I REPORT

MICRO-STEREOSCOPE AND BINOCULAR

MICROSCOPE COMBINATION

CHANGE NOTICE NO. 1

E. CAMERA LENS

The camera lens picks up the intermediate image formed by the zoom lens and relays this image to the film plane of the polaroid film pack adapter.

There will be no difference in magnification between the visible mode and the photographic mode. The entire film format will always be filled regardless of the magnification.

One point should be made clear and that is that the observer will actually see more of the object through the eyepiece than he can photograph. This is because the virtual image formed by the eyepiece has a larger diagonal than that of the film pack.

The camera lens will be a short focal length lens and since the angular coverage and aperture are both small, there should be no difficulty in achieving a diffraction limited system.

The drawing on Page No. 15A shows what can be seen through the eyepiece and what can be photographed.

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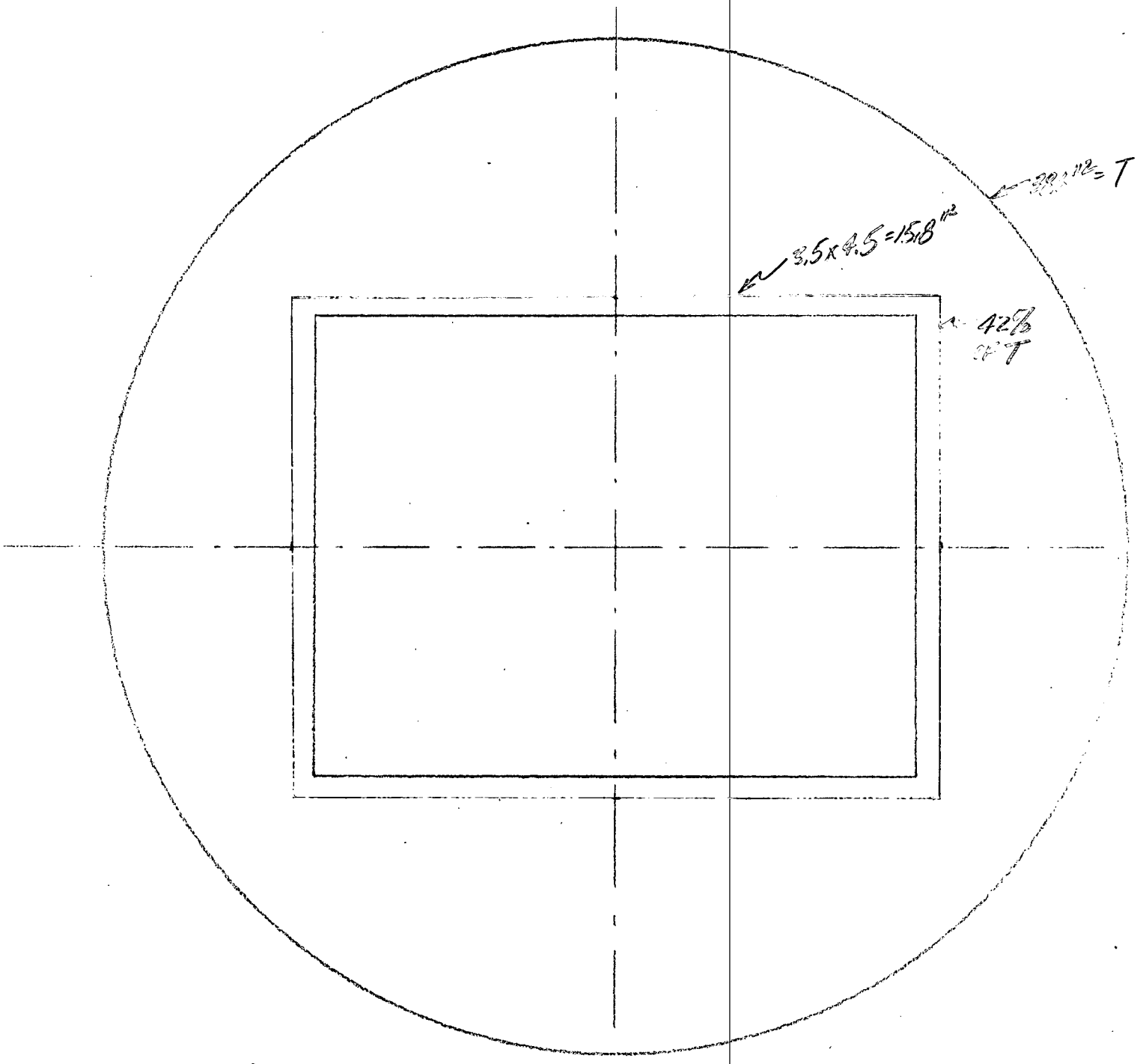

The circle represents the image or picture as seen through the 10X eyepiece at any magnification. The rectangle represents the size of the polaroid. The polaroid format can handle only 33.9% of the visible image, in other words 33.9% of the total area of the object will appear on the 3" x 4" polaroid picture regardless of the size of the object , but at the same magnification as seen through the eyepiece.

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